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| 10/785,442 | 02/23/2004 | Francis C. Dlubak | DLUB 64538 | 8528 |

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| EXAMINER |
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WENDELL, MARK R

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| ART UNIT | PAPER NUMBER |
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3635

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04/10/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/785,442 | Applicant(s) DLUBAK, FRANCIS C. | |
| | Examiner MARK R. WENDELL | Art Unit 3635 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,8,9,15,20-24,28-30,48-55,57-59,64 and 67-74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-6, 8-9, 15, 20-24, 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewkowitz (US 2003/0188498) in view of Downes (US 2576392).

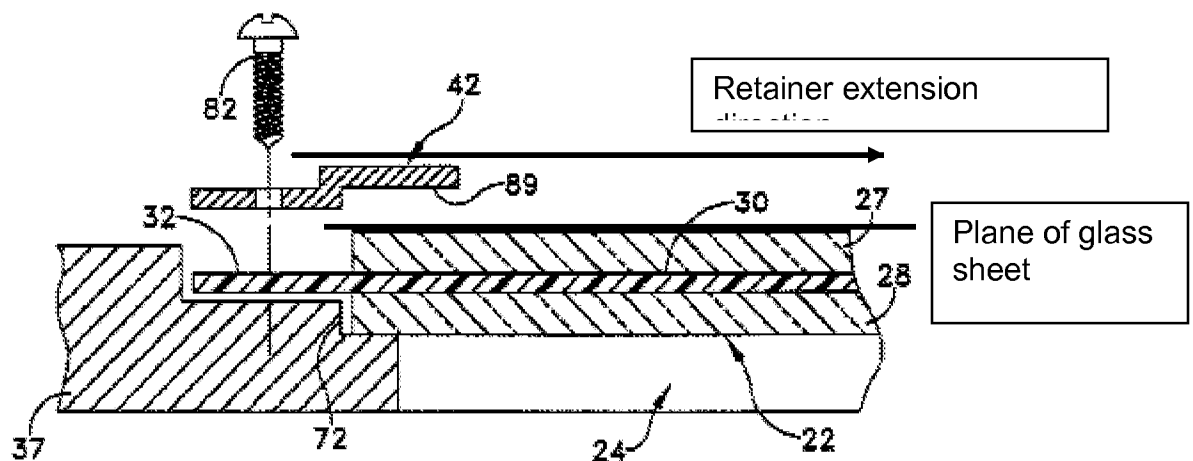
Regarding claim 1, Lewkowitz illustrates in Figure 3 a blast resistant assembly comprising:

- A frame (37);
- A composite panel having at least one glass sheet (27, 28) and at least one polymeric layer (30) mounted in the frame (37);
- At least one retainer (42, 82, 89) extending from the frame (37) and at least partially embedded in the polymeric layer (30). The examiner notes that the retainer (82) is fastened, or embedded, through the polymeric layer (30) into the frame (37).

However, the reference does not distinctly disclose the retainer being fastened inside the peripheral edge of the at least one glass sheet. Downes illustrates in Figure 7 a laminated window with a retainer that is fastened inside the peripheral edge of the glass

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sheet. It would have been obvious to one having ordinary skill in the art at the time of invention to utilize the idea of Downes and fasten the glass and retainer of Lewkowitz in such a way that the retainer (216 of Downes) is embedded in the polymeric layer (middle layer 220 of Downes) inside the peripheral edge of the outer sheets (223 and 224) in order for a more stable and secure connection to the frame. The examiner notes that the illustrative picture below shows how the extension direction of the retainer is parallel to the plane of the glass sheet.



Regarding claim 2, Lewkowitz illustrates in Figure 3 the composite panel comprising a plurality of glass sheets (27, 28) with the polymeric layer (30) located between.

Regarding claim 3, Lewkowitz illustrates in Figure 3 the retainer (42, 82, 89) comprising:

- A base (42) connected to the frame;

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- An extension (82) connected to the base (42) where the extension is at least partially embedded in the polymeric layer (30).

Regarding claim 5, Lewkowitz illustrates in Figure 3 the base (42) being a separate part installed in the frame (37).

Regarding claim 6, Lewkowitz illustrates in Figure 3 the extension (82) comprising two opposed faces contacting the polymeric layer (30).

Regarding claims 8 and 9, Lewkowitz illustrates in Figure 3 the extension (82) comprising serrated surface features for securing it within the polymeric layer (30). The examiner notes that it is well known in the art that a fastener, or screw, has a serrated surface.

Regarding claim 15, Lewkowitz illustrates in Figure 3 the base (42) having a generally rectangular cross section.

Regarding claims 20-22, Lewkowitz illustrates in Figure 3 a retainer (42) that is both slidably and pivotally mounted to the frame (37). The examiner notes that the extension (82), or screw, allows the retainer to pivot. Also, the examiner notes that the retainer slides into the groove formed by the glass (27), polymeric layer (30), and the frame (37).

Regarding claims 23-24, Lewkowitz illustrates in Figure 3 a composite panel with glass layers (27, 28) and a polymeric layer (30) in between. The examiner notes that the

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terms “formed by” render the claims product by process. A quote from MPEP 2113 states, “Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).”

Regarding claim 29, Lewkowitz illustrates in the Figure 3 a retainer (42) that discontinuously surrounds the composite panel.

Regarding claim 30, Lewkowitz illustrates in the Figure 3 the composite panel (27, 28, 30) having a flat surface.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lewkowitz (US 2003/0188498) and Downes (US 2576392) as applied to claim 1 and in further view of Farrar (US 6425215). It is discussed above what is disclosed by Lewkowitz and Downes, however the references do not teach the retainer continuously surrounding the composite panel. Farrar illustrates in Figure 2 a retainer (102) continuously surrounding the composite panel (170, 176). It would have been obvious to one having ordinary skill in the art at the time of invention to combine the blast resistant assembly of Lewkowitz

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in view of Downes with the continuous retainer to Farrar in order to provide more support and an airtight seal to the composite panel.

Claims 48-51, 55, 57-59, 64, 67-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewkowitz (US 2003/0188498) in view of Bayley (US 2161791) and Downes (US 2576392). It is discussed above what is disclosed by Lewkowitz and Downes; however references do not teach both an inner and outer frame where the inner frame is pivotally mounted to the outer frame. Regarding claim 48, Bayley illustrates in Figure 1 a window assembly with an inner frame (20) pivotally connected to an outer frame (22). It would have been obvious to one having ordinary skill in the art at the time of invention to modify the blast resistant assembly of Lewkowitz with the inner and outer frame structure of Bayley for ventilation purposes (Bayley, Column 1, lines 19-22).

Regarding claim 49, Lewkowitz illustrates in Figure 3 a retainer (42) within the inner frame (37).

Regarding claim 50, Bayley illustrates in Figure 1 the inner frame (20) being pivotal between an open and closed position with the outer frame (22).

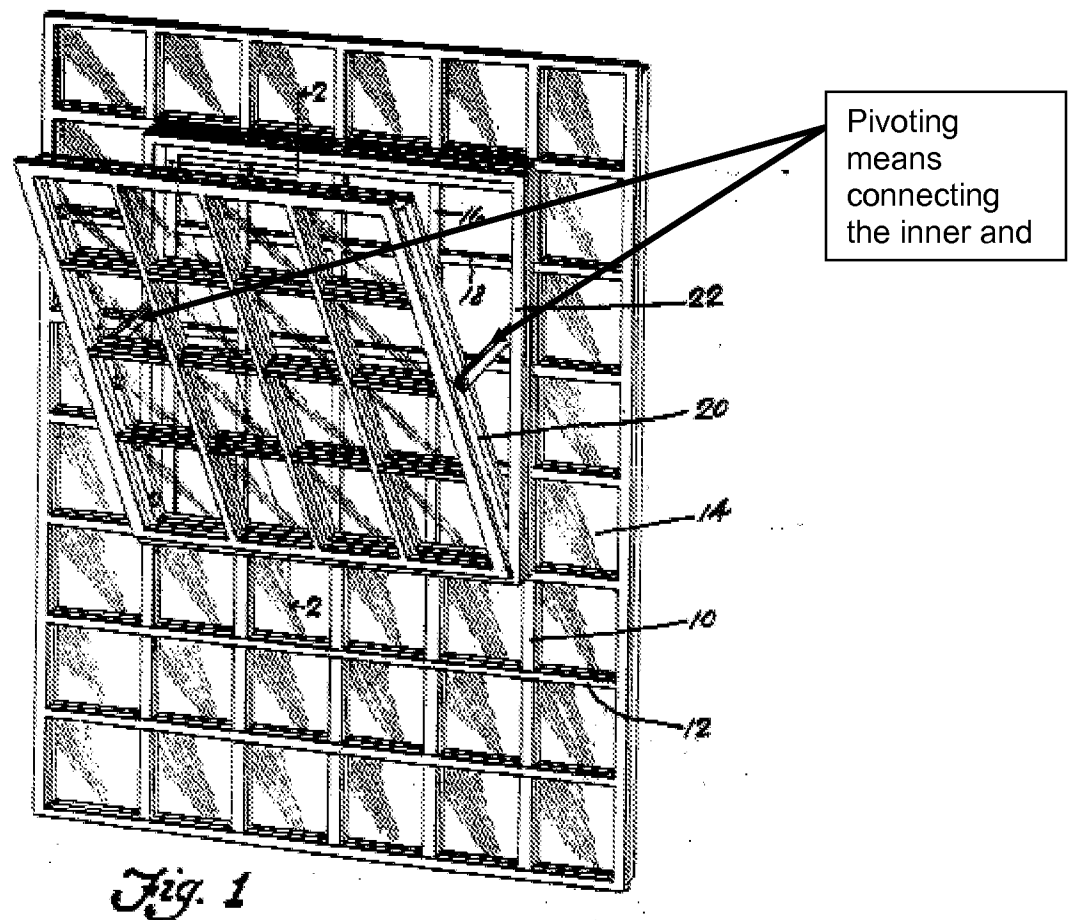
Regarding claim 51, Bayley illustrates in Figure 1 the inner frame (20) being removable from the outer frame (22). The examiner notes that one would only need to remove the fastening member within the hinge to remove the inner frame from the outer frame.

Regarding claim 55, Lewkowitz illustrates in the Figure 3 the composite panel (27, 28, 30) having a flat surface.

Regarding claim 57, Lewkowitz illustrates in Figure 3 a blast resistant assembly comprising:

- A composite panel having at least one glass sheet (27, 28) and at least one polymeric layer (30) mounted in the frame (37);
- At least one retainer (42, 82, 89) extending from the inner frame (37) and at least partially embedded in the polymeric layer (30).

However, the reference does not distinctly disclose the retainer being fastened inside the peripheral edge of the at least one glass sheet. Downes illustrates in Figure 7 a laminated window with a retainer that is fastened inside the peripheral edge of the glass sheet. Bayley illustrates in Figure 1 a window assembly with an inner frame (20) pivotally connected to an outer frame (22). It would have been obvious to one having ordinary skill in the art at the time of invention to modify the blast resistant assembly of Lewkowitz in view of Downes with the inner and outer frame structure of Bayley for ventilation purposes (Bayley, Column 1, lines 19-22). The examiner notes that the Figure below illustrates the pivoting means which connects the inner and outer frames together along the outer peripheral edges (item 20, which are on opposite sides, thus opposing) of the inner frame.



Regarding claims 58 and 59, Lewkowitz illustrates in Figure 3 the extension (82) comprising serrated surface features for securing it within the polymeric layer (30).

Regarding claim 64, Lewkowitz illustrates in Figure 3 the base (42) having a generally rectangular cross section.

Regarding claims 67-69, Lewkowitz illustrates in Figure 3 a retainer (42) that is both slidably and pivotally mounted to the inner frame (37). The examiner notes that the

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extension (82), or screw, allows the retainer to pivot. Also, the examiner notes that the retainer slides into the groove formed by the glass (27), polymeric layer (30), and the inner frame (37).

Regarding claim 70, Bayley illustrates in Figure 1 the inner frame (20) being pivotal between an open and closed position with the outer frame (22).

Regarding claim 71, Bayley illustrates in Figure 1 the inner frame (20) being removable from the outer frame (22). The examiner notes that one would only need to remove the fastening member within the hinge to remove the inner frame from the outer frame.

Claims 52-54 and 72-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewkowitz (US 2003/0188498) in view of Bayley (US 2161791) and Downes (US 2576392) as applied to claims 48-51, 55, 57-59, 64, 67-71 above, and in further view of Handell (US 1589957). It is described above what is disclosed by both Lewkowitz, Downes and Bayley, however neither teaches pin and hinge members for securing the inner frame to the outer frame. Handell illustrates in Figure 1:

- At least one hinge member (18) positioned on the inner surface (11) having a longitudinal hole (Figure 6, item 17);
- At least one pin (25) mounted within the longitudinal hole (17) on the hinge member (18);

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It would have been obvious to one having ordinary skill in the art at the time of invention to modify the blast resistant assembly of Lewkowitz as modified by Bayley and Downes to include the pin and hinge members of Handell for easy attachment and detachment of the inner frame from the outer frame.

Regarding claims 53 and 73, Handell illustrates in Figure 1 a slidable bar (24) for mounting the pin.

Regarding claims 54 and 74, Handell illustrates in Figure 1 a handle (31) mounted to the slidable bar (24).

Response to Arguments

Applicant's arguments filed 1/22/2009 have been fully considered but they are not persuasive. Regarding the applicant's argument that it would go against the teaching of the Lewkowitz reference to place the fastener inside the peripheral edge of the glass sheet as shown in Downes, the examiner disagrees. As illustrated in Figures 1 and 4 of Downes, multiple fasteners are used to hold the laminated window in place. Lewkowitz also illustrates in Figure 5 multiple fasteners holding the retainer in place. It would not go against the teachings of either reference to add additional fasteners to the Lewkowitz reference to more securely hold the retainer and window in place. In paragraphs 35 and 48 of Lewkowitz, it is implied that the fastener pierces through the polymeric sheet to hold the pane in place. If additional fasteners were placed inside the periphery of the

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glass, as taught by Downes, the fasteners would still extend through the polymeric sheet that is between the panes of glass, thus satisfying the teachings of Lewkowitz.

Regarding the argument that Downes teaches away from placing the fastener through the glass panels, the examiner disagrees. In Figure 2, a fastener (17) passed through a top layer (24) of glass and into the retainer / frame member. Therefore, the applicant's argument that Downes teaches away and does not show any fasteners passing through glass is completely false.

Regarding the argument relating to the pivoting motion of inner and outer frames, the applicant is pointed to the Figure added to the Office Action above pointing out two pivoting mechanisms attached to opposite edges of the inner frame.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK R. WENDELL whose telephone number is (571)270-3245. The examiner can normally be reached on Mon-Fri, 7:30AM-5PM, Alt. Fri off, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571) 272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard E. Chilcot, Jr./
Supervisory Patent Examiner, Art Unit 3635

/M. R. W./
Examiner, Art Unit 3635
April 7, 2009